

L Number	Hits	Search Text	DB	Time stamp
1	13546	fault adj detection	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:15
2	4	((fault adj detection) same (electrical adj short))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:18
3	0	((fault adj detection) same (line adj filter))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
4	0	((fault adj detection) same (power adj filter))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
5	406	((fault adj detection) same filter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
6	104	((((fault adj detection) same filter) same line))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
7	4	(((((fault adj detection) same filter) same line) same measure))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:23
8	41	(((((fault adj detection) same filter) same line) same voltage))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:36
9	7853	electrical adj short	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:36
10	96	((electrical adj short) same filter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:37
11	13	((((electrical adj short) same filter) same line))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:42
12	2	("4536686").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43
13	3	("4028593").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43

14	2	("3573577").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43
15	2	("5227704").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:57
16	2921	118/500	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:57
17	2921	118/500	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:57
18	419	118/500 and chuck	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:58
19	133	(118/500 and chuck) and electrostatic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:59
20	22	((118/500 and chuck) and electrostatic) and collar	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:01
21	293	118/501	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:01
22	35	118/501 and chuck	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:15
23	0	118/501 and electrostatic-chuck	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:16
24	18	118/501 and electrostatic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:17
25	21007	279/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:17
26	4356	279/\$ and chuck	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:17
27	393	(279/\$ and chuck) and electrostatic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:18

28	28	((279/\$ and chuck) and electrostatic) and collar	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:22
29	36119	269/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:23
30	1897	269/\$ and chuck	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:23
31	229	(269/\$ and chuck) and electrostatic	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:23
32	9	((269/\$ and chuck) and electrostatic) and collar	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 12:26
33	2077	(inverter converter) same fault same (detection detector)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 13:15
34	105	((inverter converter) same fault same (detection detector)) same (short adj circuit)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 13:15
35	7	((inverter converter) same fault same (detection detector)) same (short adj circuit)) same (open adj circuit)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 13:19
36	31	((inverter converter) same fault same (detection detector)) same (fault adj protection)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 13:19

L Number	Hits	Search Text	DB	Time stamp
1	13546	fault adj detection	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:15
2	4	((fault adj detection) same (electrical adj short)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:18
3	0	((fault adj detection) same (line adj filter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
4	0	((fault adj detection) same (power adj filter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
5	406	((fault adj detection) same filter	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
6	104	((((fault adj detection) same filter) same line	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:19
7	4	(((((fault adj detection) same filter) same line) same measure	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:23
8	41	(((((fault adj detection) same filter) same line) same voltage	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:36
9	7853	electrical adj short	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:36
10	96	((electrical adj short) same filter	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:37
11	13	((((electrical adj short) same filter) same line	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:42
12	2	("4536686").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43
13	3	("4028593").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43

14	2	("3573577").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:43
15	2	("5227704").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/13 11:44

DERWENT- 2003-198036

ACC-NO:

DERWENT- 200319

WEEK:

4416377

COPYRIGHT 1999 DERWENT INFORMATION LTD

**TITLE:** Electrical short detection method in power devices of railway train propulsion system, involves measuring voltage across power line filter for preset time, when initial voltage of filter is less than predefined threshold

**INVENTOR:** KUMAR, A K; MCGARRY, J

**PATENT-ASSIGNEE:** KUMAR A K[KUMAI] , MCGARRY J[MCGAI]

**PRIORITY-DATA:** 2001US-0828382 (April 6, 2001)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20020145842 A1	October 10, 2002	N/A	009	H02H 003/08

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US20020145842A1	N/A	2001US-0828382	April 6, 2001

**INT-CL (IPC):** H02H003/08, H02H005/04

**ABSTRACTED-PUB-NO:** US20020145842A

**BASIC-ABSTRACT:**

**NOVELTY** - An initial voltage across a power line filter is measured. When the measured voltage is less than a predefined threshold, the voltage developed across the filter for preset time interval is measured. When the magnitude of the developed voltage reached power line voltage within the preset time interval, the presence of electrical short condition is determined.

**DETAILED DESCRIPTION** - INDEPENDENT CLAIMS are included for the following:

(1) a method for detecting faults indicative of electrical open condition in power devices of vehicle propulsion systems; and

(2) a method for detecting electrical faulty conditions in power devices of vehicle propulsion systems.

**USE** - For detecting electrical short condition in power devices such as SCR, thyristor, solid state rectifiers used in propulsion system of vehicles such as trains, transit vehicles, etc.

ADVANTAGE - By measuring the voltage across the power line filter for preset time interval, the failure of the power devices can be quickly and reliably detected. Hence the vehicle operator is allowed to proactively arrange for repair and/or maintenance services, that prevent potentially costly collateral damage to other components of the propulsion system.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic diagram of the power circuit of the vehicle propulsion system.

CHOSEN- Dwg.1/4

DRAWING:

TITLE- ELECTRIC SHORT DETECT METHOD POWER DEVICE RAILWAY TRAIN PROPEL

TERMS: SYSTEM MEASURE VOLTAGE POWER LINE FILTER PRESET TIME INITIAL VOLTAGE  
FILTER LESS PREDEFINED THRESHOLD

DERWENT-CLASS: S01 U24 X13 X23

EPI-CODES: S01-G04A1; U24-F; X13-C01A; X23-A02G; X23-A05;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2003-157308